

A CONTRIBUTION TO THE VASCULAR FLORA OF VENKATAGIRI HILLS AND ENVIRONS¹

B. SURYANARAYANA²

Floristic information on Venkatagiri Hills (in the Eastern Ghats) and environs is wanting except for rare references in *Flora of the Presidency of Madras* (Gamble 1957). This report covers plants collected during 1969-1971 in the area, and is the first report on the flora of the area and lists 320 plants belonging to 90 families. Among these, 9 are pteridophytes, 247 are dicotyledons and 64 are monocotyledons. Further, *Canscora perfoliata* Lamk. is reported for the first time from the Eastern Ghats of India. *Habenaria digitata* Lindl., *H. hollandiana* Sant. and *Sporobolus piliferus* Kunth are new records for Rayalaseema in Andhra Pradesh.

INTRODUCTION

Venkatagiri hills, a part of Veligondla hills in the Eastern Ghats, are situated 15 km from Venkatagiri Town in the West 13° 57'N and 79° 37'E. They are 79 km off the sea coast. The altitude of the hills in the area ranges between 500 m and 1033 m. The hills can be approached only on foot, from Venkatagiri and the journey is strenuous. Venkatagiri is a small town, 130 km north-west of Madras and is connected both by rail and road. The Kaivalya river traverses the area and is fed by a small water-falls at Malleswara Kona in the hills. Though the area is rich in vegetation, floristic information is lacking except for stray citations as "Veligondla hills" and "Venkatagiri Drug (Cuddapah)" found in *FLORA OF THE PRESIDENCY OF MADRAS* (Gamble 1957). Therefore botanical excursions were conducted within a 15 km radius of Venkatagiri which include Ammapalem, Jayampu, Malleswara Kona, Mogallagunta, Palemkota and Venkatagiri hills for two years during 1969 to 1971, covering

all the seasons of a year. A number of plants were collected in different stages of their life histories and ample field notes were taken. However this paper lists 320 plants spread over 90 families. Of these 9 are pteridophytes, 247 are dicotyledons and 64 are monocotyledons. The identifications of most of the plants were confirmed at the Botanical Survey of India, Southern Circle, Coimbatore by the author. The specimens are deposited in the Herbarium, Visvodaya College, Venkatagiri Town. But the cyperaceous specimens are stored in the herbarium of the Presidency College, Madras.

Climate: On the whole the weather is rather dry and the temperature reaches even 44°C during the hot period, from March to early June.

Monsoon occurs in two phases. The south-west monsoon, the first phase, occurs between June to September bringing down the temperature. The north-east monsoon is the second phase causing heavy showers, during October-December. The cold weather is between January and February. The annual average rain fall is about 105 cm.

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² Visvodaya College, Venkatagiri, Andhra Pradesh.

GENERAL PATTERN OF VEGETATION

After a few showers of rain by about the middle of June, the land is covered by a number of sprouting grasses. *Borreria articularis* (L.f.) Will., *Bulbostylis barbata* (Rottb.) Cl., *Cleome aspera* Koenig, *Hybanthus enneaspermus* (L.) F. Muell., *Indigofera linnaei* Ali, *Tribulus terrestris* Linn., are found among grasses. In the second half of monsoon, grasses grow fairly tall. *Apluda mutica* Linn., *Chloris barbata* Sw., *Cymbopogon martinii* (Roxb.) Wats., *Eragrostis* sp., *Heteropogon contortus* (L.) P. Beauv. ex R. & S., *Perotis indica* (L.) O. Kuntze etc. are often found in mixed or pure stands. Among these tall grasses a number of other plants are noticed namely *Ageratum conyzoides* Linn., *Corchorus aestuans* Linn., *Croton bonplandianum* Baill., *Eclipta alba* (L.) Hassk., *Euphorbia hirta* Linn., *Phyllanthus asperulatus* Hutch., *Sida acuta* Burm. f. etc. By the end of the monsoon or a little later most of the monsoon vegetation disappears and those characteristic of the cold season appear. Some of the common ones are *Andrographis echiodoides* (L.) Nees, *Anisomelis malabaricus* R.Br., *Barleria prionitis* Linn., *Blumea* sp., *Elytraria acaulis* (L.f.) Lindau, *Heliotropium indicum* Linn., *Lepidagathis mitis* Dalz., *Leucas aspera* (Willd.) Sprang., *Orthosiphon pallidus* Royle ex Bth., etc.

The forests are mainly of two types. 1) dry deciduous on the hills and 2) scrub on the plains.

Vegetation of dry deciduous forests: The thick forests in the area are now subjected to significant disturbance by indiscriminate felling and fire operations for the sake of fuel. Therefore there is every danger of these forests being reduced to scrub jungles in course of time. Trees do not seem to reach a good height and are stunted in growth.

The common trees of the forests are: *Anogeissus latifolia* (Roxb.) Wall. ex Bedd., *Erythroxylon monogynum* Roxb., *Hardwickia binata* Roxb., *Lannea coromandelica* (Houtt.) Merr., *Manilkara hexandra* (Roxb.) Dub., *Strychnos nux-vomica* Linn., *Terminalia chebula* Retz. etc.

The following are occasional trees: *Albizzia amara* Boivin, *Dalbergia paniculata* Roxb., *Madhuca logifolia* (Koenig) Macbride, *Spondias pinnata* (L.f.) Kurz., *Vitex altissima* L.f.

Buchanania angustifolia Roxb., *Vitex leucoxylon* Linn.f. etc., are rare.

The hedges along footpaths in the forests are commonly represented by *Barleria prionitis* Linn., *Carissa spinarum* Linn., *Diospyros chloroxylon* Roxb., *Maba buxifolia* (Roxb.) Pers., *Memecylon edule* Roxb., *Meytenus emarginata* (Willd.) Ding Hou, *Tarenna asiatica* (L.) Alston, *Xeromphis spinosa* (Thunb.) Keay, *Zizyphus xylopyrus* (Retz.) Willd.

The following are a few of the common climbers on large shrubs: *Ampelocissus tomentosa* (Heyne ex Roth) Planch., *Dioscorea oppositifolia* Linn., *D. pentaphylla* Linn. var. *linnaei* Pr. & Burk, *Hemidesmus indicus* (L.) Schultes, *Pergularia daemia* (Forsk.) Blatt. & McC. and *Rivea hypocrateriformis* (Lam.) Choisy. etc.

Derris scandens (Roxb.) Bth., *Hugonia mystax* Linn., *Pterolobium indicum* A. Rich., and *Ventilago denticulata* Willd. are occasional lianas noticed on tall trees.

Vegetation of scrub jungles: Scrub jungles in the area are commonly represented by *Acacia nilotica* (L.) Del. subsp. *indica* (Bth.) Brenan, *Bauhinia racemosa* Lamk., *Carmona retusa* (Vahl) Masamune, *Dodonaea viscosa* (L.) Jacq., *Euphorbia trigona* Haw., *Maba buxifolia* Pers., *Meytenus emarginata* (Willd.) Ding Hou, *Plectronia parviflora* Bedd., *Tarenna asiatica* (L.) Alston and *Zizyphus xylopy-*

rus (Retz.) Willd. etc.

Riparian and pond flora: *Alangium salviifolium* (L.f.) Wang., *Allophylus cobbe* (L.) Raeusch., *Flemingia strobilifera* R. Br., *Helicteres isora* Linn., *Homonoia riparia* Lour., *Mallotus philippinensis* (Lamk.) Muell.-Arg., *Pterospermum heyneanum* Wall. etc., form significant components of the vegetation in valleys along the water courses.

In some ponds and water logged areas of the river *Aponogeton natans* (L.) Engler & Krause, *Hydrilla verticillata* Royle, *Ottelia alismoides* (L.) Pers., *Najas minor* All. var. *spinosa* Rendle, *Vallisneria spiralis* Linn., etc., are found in abundance.

On the moist banks of rivers and along the wet margins of temporary ponds *Bacopa monnieri* (L.) Wettstein, *Phyla nodiflora* (L.) Greene form brightly coloured dense mats of vegetation. Along with them several other common and noteworthy plants also are found growing. A few of them are *Alternanthera sessilis* (L.) DC., *Ammannia baccifera* Linn., *A. multiflora* Roxb., *Bulbostylis barbata* (Rottb.) Cl., *Cleome aspera* Koenig, *Commelina diffusa* Burm. f., *Cyperus tenuispica* Steud., *Eriocaulon quinquangulare* Linn., *Ludwigia perennis* Linn., etc. At certain isolated localities *Saccharum spontaneum* Linn., forms a thick hedge along the water course.

In the dry ground of the river-bed and drying temporary ponds *Argemone mexicana* Linn., *Glinus totoides* Linn., *Heliotropium supinum* Linn. and *Solanum surattense* Burm. f. etc., form loose or dense patches. Other common plants are: *Aerva lanata* (L.) Juss., *A. monsoniae* Mart., *Anisomelis malabaricus* R. Br., *Calotropis gigantea* (L.) R. Br., *Cassia auriculata* Linn., *Datura fastuosa* Linn., *Fimbristylis* sp., *Jatropha gossypifolia* Linn., *Leucas aspera* (Willd.) Spreng., *Vitex negundo* Linn., etc.

Vegetation along roadsides: *Aegle marmelos* (L.) Corr., *Albizzia lebbek* (L.f.) Bth., *Azadirachta indica* A. Juss., *Derris indica* (Lam.) Bennett. *Fiscus religiosa* Linn., *Limonia acidissima* Linn., *Sapindus emarginatus* Vahl, *Syzygium cuminii* Skeels., *Thespesia populnea* Cav., etc., are common along roadsides either planted or growing wild.

A number of plants together form thick hedges along roadsides. Among them a few prominent and common ones being, *Carissa carandas* Linn., *Diospyros chloroxylon* Roxb., *Euphorbia trigona* Haw., *Meytenus emarginata* (Willd.) Ding Hou, *Securinega virosa* (Roxb. & Willd.) Pax. & Hoffm., *Tarenna asiatica* (L.) Alston, *Zizyphus oenoplia* Mill. etc., *Anisomelis indica* (L.) O.K., *Barleria prionitis* Linn., and *Cassia auriculata* Linn., are a few other common and attractive plants, by their brightly coloured flowers, among the roadside hedges.

On these hedges many twiners and climbers were noted belonging to the families, Asclepiadaceae, Convolvulaceae, Menispermaceae, Papilionaceae and Vitaceae. Among them the common ones are *Cissus quadrangularis* Linn., *Cocculus hirsutus* (L.) Diels, *Gymnema sylvestre* (Retz.) R. & S., *Pergularia daemia* (Forsk.) Chiov., *Teramnus labialis* Spreng., *Tylophora indica* Merr.

Several herbs are found growing in the undergrowth. e.g., *Aerva lanata* (L.) Juss., *Andrographis echioides* (L.) Nees, *Asystasia gangetica* T. Anders., *Boerhavia diffusa* Linn., *Elytraria acaulis* (L.f.) Lindau, *Hibiscus ovalifolius* (Forsk.) Vahl, *Justicia diffusa* Wild., *Orthosiphon pallidus* Royle ex Bth., *Pavonia zeylanica* Cav.

Vegetation in cultivated fields: From the moist cultivated fields a number of plants were collected. Some of the common and prostrate herbs are *Borreria articularis* (L.f.) F. N.

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Will., *Cleome aspera* Koenig, *Hybanthus encnascpermus* (L.) F. Muell., *Indigofera cordifolia*. Heyne ex Roth, *Merremia tridentata* Hallier, *Mollugo nudicaulis* Lam., *Tribulus terrestris* Linn., etc. Several other common but erect plants also were noticed in these fields. To mention a few: cyperaceous plants, *Eclipta alba* (L.) Hassk., *Euphorbia hirta* Linn., *Geniosporum tenuiflorum* (L.) Merr., *Micrococca mercurialis* Bth., *Phyllanthus asperulatus* Hutch., *P. simplex* Retz. etc. After the harvest, from the drying fields several plants were collected. A few of the common ones are: *Achyranthes aspera* Linn., *Cleome viscosa* Linn., *Corchorus aestuans* Linn., *Croton bonplandianum* Baill., *Eclipta alba* (L.) Hassk., *Emilia sonchifolia* (L.) DC., *Heliotropium indicum* Linn., *Leucas aspera* (Willd.) Spreng., *Sida acuta* Burm. f., *Tridax procumbens* Linn. etc.

Plant parasites in the area: *Dendrophthoe falcata* (L.f.) Etting, *Viscum articulatum* Burm. f. are common stem parasites in forests usually found on *Anogeissus latifolius* (Roxb.) Wall. ex Bedd. and *Hardwickia binata* Roxb., *Cassytha filiformis* Linn., is another common twinning stem parasite in scrub jungles noticed on *Carissa spinarum* DC., *Striga angustifolia* (Don) Saldanha, is a frequent root parasite on grasses in the area.

ENUMERATION OF PLANTS

The plants are enumerated in accordance with Bentham and Hooker's system of classification with some delimitations of families according to Hutchinson (1960). The name of the plant is followed by a note on relative abundance, flower colour, flowering and fruiting time (Fls., Frts.) and field numbers. All the field numbers are of Suryanarayana. Where no number is stated, name of the col-

lector is given. The nomenclature adopted here has, as far as possible, been brought upto date in the light of current literature on the subject.

PTERIDOPHYTES

PSILOTACEAE

Psilotum triquetrum Sw.

Rare on moist rocks covered by humus, under shade. December, 1970. 3982.

SELAGINELLACEAE

Selaginella barbata Spring.

Occasional, but forming dense green carpets in moist humus soil along with *Anthoceros himalayensis* L. Strobili December, 1970. 3537.

ISOETACEAE

Isoetes coromandelina Linn.

Rare among grasses. Sori December, 1969. 3839.

MARSILEACEAE

Marsilea quadrifolia Linn.

Common and abundant in temporary ponds. August, 1969. 3645.

ADIANTACEAE

Adiantum caudatum Linn.

Common. Sori December, 1969, 1970. 3665, 3950.

GYMNOGRAMMACEAE

Hemionites arifolia (Burm. f.) Moore

Common. Sori December, 1969. 3664.

PTERIDACEAE

Actinopteris radiata (Sw.) Link

Occasional under the shade of rocks. Sori

December, 1970. No number, D. V. Subbaiah.

Pteris geraniifolia Raddi

Occasional under the shade of moist rocks.
Sori December, 1970. 3660.

DAVALLIACEAE

Nephrolepis cordifolia (L.) Presl.

Occasional in forests. Sori December, 1970.
3945.

DICOTYLEDONS

RANUNCULACEAE

Naravelia zeylanica (L.) DC.

Rare. A gregarious climber in thick forests.
Frts. December, 1970. 3892.

MENISPERMACEAE

Cissampelos pareira Linn.

Occasional twiners on hedges. Flowers
small green. Fls. December, 1970. 3995.

Cocculus hirsutus (L.) Diels

An occasional twiner. Flowers small, green-
ish. Fls. June, 1969. 3324.

Pachygone zeylanica (Gaertn.) Sant. & Wagh.

Occasional twiners. Flowers small green.
Fls. December, 1970. 3921.

PAPAVERACEAE

Argemone mexicana Linn.

Common in waste dry places. Flowers
yellow. Fls. and Frts. February, 1969. 3558.

BRASSICACEAE

Brassica nigra (L.) Koch.

Common in humus covered waste places.
Flowers yellow. Fls. and Frts. November,
1969. No number, D. V. Subbaiah.

CAPPARACEAE

Capparis zeylanica Linn.

Occasional on hedges. Frts. May, 1969.
3225.

Crataeva nurvala Buch.-Ham.

Rare. Frts. May, 1969. 3201.

CLEOMACEAE

Cleome aspera Koenig

Common. Flowers yellow. Fls. May, 1969.
3287.

C. gynandra Linn.

Occasional in waste places. Flowers white.
Fls. and Frts. November, 1970. 3540.

C. viscosa Linn.

Common. Flowers yellow. Fls. and Frts.
October, 1970. 4133.

VIOLACEAE

Hybanthus enneaspermus (L.) F. Muell.

Common. Flowers purple. Fls. and Frts.
May, 1969. 3288.

FLACOURTIACEAE

Flacourtia indica (Burm.f.) Merr.

Common. Flowers White. Fls. and Frts.
December, 1969, 1970. 3628, 3855.

CARYOPHYLLACEAE

Polycarpaea corymbosa (L.) Lam.

Common in grasslands. Flowers pink. Fls.
and Frts. May and November, 1969. 3291,
3495.

PORTULACACEAE

Portulaca cleracea Linn.

A common weed in moist fields. Flowers
yellow. Fls. and Frts. October, 1970. 3541.

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MALVACEAE

Abutilon indicum (L.) Sweet

Common and abundant in mixed stands. Flowers yellow. Fls. and Frts. December, 1970. 3542.

Decaschitia crotonifolia Wt. & Arn.

Common on hill slopes. Flowers large, yellow. December, 1969, 1970. 3619, 3951, 4170.

Gossypium herbaceum Linn.

Planted. Flowers yellow. Fls. February, 1970. 4015.

Hibiscus ovalifolius (Forsk.) Vahl

Common in the undergrowth of forests. Flowers white. Fls. and Frts. December, 1970. 3934.

Pavonia zeylanica Cav.

Common. Flowers bright rose. Fls. and Frts. December, 1970. 3860, 3955.

Sida acuta Burm. f.

Common. Flowers yellow. Fls. and Frts. December, 1970. 4128.

S. cordifolia Linn.

Common. Flowers yellow. Fls. and Frts. December, 1970. 3899.

Thespesia populnea Cav.

Planted. Flowers yellow with a purple centre. Fls. June, 1969. 3234, 3393.

STERCULIACEAE

Byettneria herbacea Roxb.

Common on hill slopes among tall grasses. Fls. and Frts. December, 1970. 4109, 4151.

Helicteres isora Linn.

Common in forests. Flowers red. Fls. November. Frts. December, 1969, 1970. 3625, 3643, 4144, 4160.

Melhania incana Heyne ex Wt. & Arn.

Rare in the forests of Jayampu. Fls. and Frts. December, 1970. 3871.

Melochia corchorifolia Linn.

Occasional. Flowers purple. Fls. and Frts.

December, 1970. 3830.

Pterospermum heyneanum Wall.

Occasional in thick forests. Flowers not seen. Frts. December, 1969. 3614.

Waltheria indica Linn.

Occasional. Flowers yellow. Fls. and Frts. December, 1970. 3858.

TILIACEAE

Corchorus aestuans Linn.

A common weed. Flowers yellow. Fls. and Frts. December, 1970. 3902.

C. olitorius Linn.

Common on earth bunds of the cultivated fields. Flowers yellow. Fls. November, 1969. Frts. December, 1970. 3483, 3998.

Grewia hirsuta Vahl

Occasional. Frts. December, 1970. 3952.

G. rhamnifolia Heyne ex Roth

Occasional. Frts. December, 1969, 1970. 3618, 3881.

Triumfetta pentandra A. Rich.

Common in the undergrowth of forests. Flowers yellow. Fls. and Frts. December, 1969, 1970. 3613, 3944.

LINACEAE

Hugonia mystax Linn.

Occasional in the forests. This specimen matches with the herbarium sheets of Madras Herbarium, BSI, Coimbatore. But in the absence of flowers or fruits the identification is provisional. December, 1970. 3875.

ERYTHROXYLACEAE

Erythroxylon monogynum Roxb.

A common tree in forests. Fls. and Frts. November, December, 1969, 1970. 3469, 3941.

ZYGOPHYLLACEAE

Tribulus terrestris Linn.

Common. Flowers yellow. Fls. and Frts. November, 1969. 3515.

BALSAMINACEAE

Impatiens balsamina Linn.

Rare but abundant in pure stands at Malleswara Kona. Flowers purple. Fls. and Frts. December, 1970. 3904.

RUTACEAE

Aegle marmelos (L.) Corr.

Occasional in forests and near villages. Frts. November, 1969. 3601.

Glycosmis cochinchinensis (Lour.) Pierre ex Engler.

Common in forests. Fls. (buds), December, 1970. 3802.

Limonia acidissima Linn.

Planted. Frts. May, June, 1969. 3267, 3390.

MELIACEAE

Azadirachta indica A. Juss.

Common. Frts. June, 1969. 3391.

CELASTRACEAE

Elacodendron roxburghii Wt. & Arn.

Common. The plants are very much stunted when growing in scrub jungles. Flowers and fruits not noticed but the specimens match with the herbarium sheets at Madras Herbarium, BSI, Coimbatore. Therefore identification is tentative. 1970. 3979.

Meytenus emarginata (Willd.) Ding Hou

Common in scrub jungles. Flowers white. Fls. November, 1970. 3808, 3864. Frts. June, 1969. 3334

RHAMNACEAE

Scutia circumcissa (L.f.) Druce

An occasional armed shrub in the scrub jungles. Flowers small, greenish-white. Fls. November, 1970. 3385, 3791.

Ventilago denticulata Willd.

Rare, but a gregarious climber. Flowers pale green. Fls. December, 1970. 3924, 4169.

Zizyphus mauritiana Lam.

Occasional. Flowers pale white. Fls. November, 1969. 3543.

Z. oenoplia Mill.

Common in hedges. Frts. December, 1970. 3876.

Z. xylopyrus (Retz.) Willd.

Common in forests. Frts. December, 1970. 3886, 4148.

VITACEAE

Ampelocissus tomentosa (Heyne ex Roth) Planch.

Common. Flowers scarlet. Fls. and Frts. December, 1970. 3938, 3974.

Cissus quadrangularis Linn.

Common in plains, straggling on shrubs. Flowers red. Fls. and Frts. May, 1969. 3209, 3259.

C. vitifolia Linn.

Occasional on hedges. Flowers small, greenish. Fls. and Frts. June, 1969. 3356.

Leea indica (Burm.f.) Merrill.

Rare in ravines. Frts. December, 1970. 3918.

SAPINDACEAE

Allophylus cobbe (L.) Raesch.

Common. Flowers small, white. Fls. November, Frts. December, 1969, 1970. 3612, 3795, 3853, 3932.

Cardiospermum canescens Wall.

Rare, a gregarious twiner on large shrubs.

Flowers white. Fls. and Frts. December, 1970. 3965.

C. halicacabum Linn.

Rare on hedges near villages. Flowers white. Fls. May, 1969. 3211, 3297.

Dodonaea viscosa (Linn.) Jacq.

Common in scrub jungles. Flowers purplish-yellow. Fls. November, Frts. December, 1969. 3279, 3407, 3467.

Sapindus emarginatus Vahl

Occasional in forests, sometimes planted in villages. Fls. December, Frts. June, 1969, 1970. 3387, 3882.

ANACARDIACEAE

Anacardium occidentale Linn.

Planted. Flowers red. Fls. January, 1969. No number, D. V. Subbaiah.

Buchanania angustifolia Roxb.

Rare. Flowers not seen. Frts. December, 1970. 4141.

Lannea coromandelica (Houtt.) Merr.

Common. Flowers greenish-yellow. Fls. December, 1969, 1970. 3641, 3928.

Mangifera indica Linn.

One tree near the water fall at Malleswara Kona; planted elsewhere. December, 1970. 3991.

Spondias pinnata (L.f.) Kurz.

Occasional in forest. Vegetative. December, 1970. 3915.

PAPILIONACEAE

Abrus precatorius Linn.

Occasional. Frts. December, 1970. 3916.

Aeschynomene indica Linn.

Common. Flowers yellow. Fls. and Frts. December, 1970. 3846, 4119.

Arachis hypogaea Willd.

Probably an escape from cultivation. Flowers yellow. Fls. and Frts. January, 1970. 3999.

Butea monosperma (Lam.) Taub.

Occasional. The trees are very stunted and do not attain more than 3 metres height. Flowering not observed in the area, but reddish-orange flowers were noticed in the forest near Kurnool. Fls. February, 1973. 3207.

Canavalia gladiata (Jacq.) DC.

Occasional. Flowers purple but turning blue with age. Fls. and Frts. December, 1970. 3983.

Crotalaria juncea Linn.

Occasional. Flowers yellow. Fls. and Frts. January, 1970. 4122.

C. madurensis Wt.

Rare. Flowers yellow. Fls. January, 1970. 4166.

C. medicaginea Lamk.

Common. Flowers yellow. Fls. and Frts. December, 1970. 3879, 3947, 4147.

C. retusa Linn.

Occasional. Frts. January, 1970. 4120.

C. verrucosa Linn.

Common. Flowers blue. Fls. and Frts. December, 1970. 3879, 3947, 4147.

Dalbergia paniculata Roxb.

An occasional tree in the forest. Frts. December, 1970. 3545.

Derris indica (Lam.) Bennett

Common, but usually planted for shade. Flowers bright purple. Fls. and Frts. June, 1969. 3319, 3388.

D. scandens Bth.

Rare. Frts. November, 1970. 4111.

Desmodium pulchellum (L.) Bth.

Common and abundant at the foot of hills. Flowers white. Fls. and Frts. December, 1969, 1970. 3622, 3912, 4172.

D. velutinum (Willd.) DC.

Common at the foot of hills. Flowers purple. Fls. and Frts. December, 1970. 3907.

D. triflorum (L.) DC.

Common. Flowers purple. Fls. December,

1970. 3920.

Erythrina variegata Linn. var. **orientalis** (L.)
Merr.

A favourite hedge plant in villages. Flowers red and showy. Fls. February, 1969. 3546.

Gliricidia sepium (Jacq.) Walp.

Planted as a hedge plant. Flowers bright rose. Fls. January, 1969. No number, D. V. Subbaiah.

Heylandia latebrosa DC.

Occasional. Flowers yellow. Fls. and Frts. December, 1970. 3851, 4161.

Indigofera astragalina DC.

Rare. Frts. December, 1970. 3993.

I. cordifolia Heyne ex Roth

Common. Flowers red. Fls. November, 1970. 3794.

I. linnaei Ali

Common. Flowers Red. Fls. and Frts. June, 1969. 3312.

Ormocarpum sennoides DC.

Rare. Flowers yellow. Fls. and Frts. November, 1969. 3520, 3600.

Pseudarthria viscida Wt. & Arn.

Occasional. Flowers yellow. Fls. and Frts. December, 1970. 3911.

Rhynchosia saueolens DC.

Rare. Flowers yellow. Fls. and Frts. December, 1970. 3986.

Tephrosia tinctoria Pers.

Rare. Frts. December; 1970. 3903.

Teramnus labialis Spreng.

A common twiner on bushes. Flowers yellow. Fls. and Frts. December, 1970. 3945.

CAESALPINIACEAE

Bauhinia racemosa Lamk.

Common in scrub jungle. Very much stunted, some times even adpressed to the ground when growing in the plains. Flowers yellow.

Fls. October-November, Frts. February-June, 1969. 3200, 3412.

Cassia absus Linn.

Occasional during post monsoon. Flowers yellow. Fls. and Frts. November-December, 1969. 3548.

C. auriculata Linn.

Common and abundant. Flowers yellow. Fls. January-June, 1969. 3222, 3392, 3462.

C. fistula Linn.

Occasional in forests. Frts. December, 1970. 3812.

C. montana Heyne ex Roth

Occasional in ravines. Flowers yellow. Fls. and Frts. December, 1970. 3940, 4149.

C. occidentalis Linn.

Common in waste land. Flowers yellow. Fls. and Frts. January, 1969. 3549.

C. tora Linn.

Common. Flowers yellow. Fls. and Frts. December, 1970. 3368.

Hardwickia binata Roxb.

A common tree in forests. Fls. November, 1969. 3523.

Pterolobium indicum A. Rich.

Common. An armed straggler. Frts. November, 1969. 3529.

Tamarindus indica Linn.

Common near villages. Flowers reddish. Fls. May-June, Frts. November, 1969. No number, D. V. Subbaiah.

MIMOSACEAE

Acasia caesia Willd.

An occasional armed climber. Flowers in white heads. Fls. November, 1969. 3583.

A. ferruginea DC.

Common. Frts. December, 1970. 3883.

A. latronum Willd.

Common in scrub jungles. Fls. December, 1970. 4131.

A. nilotica (L.) Del. subsp. **indica** (Bth.)

Brenan

Common in scrub jungles. Flowers yellow. Fls. June, 1969. 3217, 3300.

A. torta (Roxb.) Craib.

Common. Flowers small in heads. Fls. and Frts. December, 1970. 3960.

Albizzia amara Boivin

Occasional in forests. Frts. December, 1969. 3584.

A. lebbek (L.) Bth.

Occasional. It is also planted as avenue tree. Fls. January, Frts. May, 1969. 3257.

Dichrostachys cinerea Wt. & Arn.

Occasional in scrub jungle. Spikes yellow-purple. Fls. November, Frts. December, 1969, 1970. 3229, 3527, 3884.

Leucaena leucocephala (Lam.) de Wit.

Occasional in villages. Frts. May, 1969. 3248, 3383.

Prosopis cineraria (L.) Druce

Common and abundant in waste land around inhabitations. Fls. December, Frts. May, 1969. 3230, 3335, 3399.

COMBRETACEAE

Anogeissus latifolius Bedd.

Common. Flowers small greenish-yellow. Fls. and Frts. December, 1970. 3914, 4165.

Terminalia bellerica (Gaertn.) Roxb.

An occasional lofty tree in forests. Frts. December, 1970. 3880.

T. chebula Retz.

Common on hill slopes at Malleswara Kona. Frts. December, 1969. 3447.

MYRTACEAE

Syzygium cumini Skeels

Common. Flowers yellowish-white. Fls. March, Frts. June, 1969, 1970. 3395, 3948.

MELASTOMACEAE

Memecylon edule Roxb.

Common. Flowers attractive blue. Fls. sparsely flowered in December in the present area. But elsewhere gregarious flowering is observed in July (1973). Frts. November, 1970. 3528, 3642.

LYTHRACEAE

Ammannia baccifera Linn.

Common in moist places. Flowers red. Fls. and Frts. February, 1970. 4010.

A. multiflora Roxb.

Common in wet fields. Flowers red. Fls. and Frts. December, 1970. 3825.

Rotala densiflora (Roth) Koehne

Occasional but found in pure or mixed stands. Flowers red. Fls. and Frts. December, 1970. 3828.

ONAGRACEAE

Ludwigia perennis Linn.

Common in wet fields. Flowers yellow. Fls. and Frts. December, 1970. 3824.

CUCURBITACEAE

Citrullus lanatus (Thunb.) Monst.

An occasional creeper in river bed. Frts. May, 1969. 3280.

Solena heterophylla Lour.

Occasional. Male flowers creamy-white. Fls. May, 1969. 3238.

Trichosanthes bracteata (Lam.) Voigt

Occasional. Frts. August, 1969, 1970. 3608, 4132.

CACTACEAE

Opuntia coccinellifera Mill.

Occasional in scrub jungles. Flowers red

and attractive. Fls. November, 1969. 3361.

O. elatior Mill.

Common. Flowers yellow. Fls. October, 1970. No number, D. V. Subbaiah.

MOLLUGINACEAE

Glinus lotoides Linn.

Common. Frts. May-June, 1969. 3242. 3310.

G. oppositifolius (L.) A. DC.

Common, flowers white. Fls. June, Frts. September, 1969, 1970. 3311, 4138.

Mollugo nudicaulis Lam.

Common. Flowers white. Fls. June, Frts. September, 1969, 1970. 3315, 4139.

AIZOACEAE

Trianthema portulacastrum Linn.

Common. Flowers bright purple. Fls. June, 1969. 3363.

ALANGIACEAE

Alangium salvifolium (L.f.) Wang.

Common in the hedges around irrigation tanks. Flowering was not noticed inspite of intense search throughout the year in the present area. Therefore identification is provisional. 1969, 1970. 3368, 3410, 3931.

RUBIACEAE

Borreria articularis (L.f.) F.N. Will.

Common. Flowers purple. Fls. November, 1969. 3587.

Canthium dicoccum (Gaertn.) T. & B.

Occasional, flowers white. Fls. November, 1969. 3477.

Gardenia lucida Roxb.

Occasional, flowers large, white but turning yellow with age. Fls. and Frts. December, 1970. 3956, 4140.

Guetarda speciosa Linn.

One tree is found, probably planted. Flowers white. Fls. January, 1970. 4112.

Knoxia sumatrensis (Retz.) DC.

Occasional in the undergrowth. Flowers white with purplish tinge. December, 1970. 3996.

Morinda tinctoria Roxb.

Planted in private compounds for fragrant white flowers. Fls. January, 1970. 4158.

Oldenlandia corymbosa Linn.

Common. Flowers white. Fls. and Frts. More or less throughout the year, 1969, 1970. 3282, 3317, 3405, 3862.

O. affinis (R. & S.) DC.

Occasional flowers white. Fls. and Frts. December, 1970. 3977.

Plectronia parviflora Bedd.

Common. Flowers white. Fls. May-June, Frts. November-December, 1969, 1970. 3301, 3332, 3379, 3855A.

Tarenna asiatica (L.) Alston

Common in forests and scrub jungles. Flowers white. Fls. December, Frts. May, 1969, 1970. 3210, 3396, 3863, 3877.

Xeromphis spinosa (Thunb.) Keay

Common. Flowers white but turning yellow with age. Fls. June, Frts. December, 1969, 1970. 3334, 3935.

ASTERACEAE

Ageratum conyzoides Linn.

Common. Heads white. Fls. and Frts. December, 1970. 3909.

Bidens biternata (Lour.) Merr. & Sherff.

Common either in mixed or pure stands. Heads yellow, November, 1969. No number, D. V. Subbaiah.

Echinops echinatus Roxb.

Rare. Found a few plants at Jayampu. Flowers white. Heads September, 1970. 3815.

Eclipta alba (L.) Hassk.

A common weed. Heads white, November, 1970. 3552.

Emilia sonchifolia (L.) DC.

Common. Heads purple, December, 1969. 3869.

Glossocardia bosvallea (L.f.) DC.

Common. Heads yellow, November, 1969. 3463.

Tridax procumbens Linn.

Common and abundant. Heads yellow, May-June, 1969. 3320, 3412.

Vernonia albicans DC.

Common. Heads purple, December, 1970. 3961.

V. cinerea (L.) Less.

Common. Heads purple, December, 1970. No number. D. V. Subbaiah.

Vicoa indica (Willd.) DC.

Occasional. Heads yellow, December, 1970. 3816.

PLUMBAGINACEAE

Plumbago zeylanica Linn.

Rare, collected from the roadside bushes on way to Railway Station. Flowers white. Fls. and Frts. January, 1969. 3554.

SAPOTACEAE

Madhuca longifolia (Koenig.) Macbride

Occasional. Flowers light-yellow, succulent. Fls. May, 1969. 3232.

Manilkara hexandra (Roxb.) Dub.

Common. Flowers white, scented. Fls. December, 1969. 3526, 3638.

EBENACEAE

Diospyros chloroxylon Roxb.

Common, often found in hedges. Flowers white. Fls. May-June, 1969, 3220, 3306.

D. melanoxylon Roxb.

Occasional in scrub jungles. Identification is provisional in the absence of flowers and fruits. May, 1969. 3205.

Maba buxifolia Pers.

Common. Frts. May-June, 1969. 3206, 3381.

OLEACEAE

Jasminum auriculatum Vahl

Common in bushes. Flowers white. Fls. and Frts. November-December, 1969, 1970. 3531, 3971.

APOCYNACEAE

Carissa carandas Linn.

Common in hedges. Flowers white. Fls. May, 1969. 3252.

C. spinarum DC.

Common. Flowers white. Fls. June, 1969. 3305.

Catharanthus pusillus (Murr.) G. Don

Rare in cultivated fields as a weed. Flowers white. Fls. and Frts. May, 1969. 3241.

Wrightia tinctoria R. Br.

Occasional in thick forests. Frts. December, 1970. 3814, 3906.

Thevetia peruviana (Pers.) Merr.

Planted. Flowers yellow. Fls. May, 1969. 3221.

ASCLEPIADACEAE

Calotropis gigantea (L.) R. Br.

Common in wasteland. Flowers bluish. Fls. November, 1969. 3536.

Caralluma adscendens (Roxb.) R. Br.

Common in large bushes. Flowers dark purple. Fls. January, Frts. July, 1970. 4107, 4124.

Ceropegia bulbosa Roxb.

Occasional in the bushes along the Railway Station Road. Flowers greenish-yellow. Fls. December, 1969. 3555.

Gymnema sylvestre (Retz.) R. Br. ex Schult.

Common. Flowers yellowish-green. Fls. November, 1969. Frts. December, 1970. 3514, 3811.

Hemidesmus indicus (L.) Schult

Common, very variable plant. Flowers yellowish-green. Fls. and Frts. December, 1970. 3865, 3922, 4264.

Pergularia daemia (Forsk.) Chiov.

Common in hedges. Frts. February, 1970. 4013.

Sarcostemma brevistigma Wt. & Arn.

Common, a leafless straggler. Flowers yellowish. Fls. November-December, 1969, 1970. 3487, 3968.

Secamone emetica R. Br.

Rare, a gregarious climber on large shrubs. Flowers pretty, yellow, Fls. November, 1969. 3461.

Tylophora indica (Burm. f.) Merr.

Common. Flowers yellowish. Fls. May-June, 1969, 1970. 3270, 3322, 4130.

LOGANIACEAE

Strychnos nux-vomica Linn.

Common in forests. Frts. November, 1969. 3204, 3521.

GENTIANACEAE

Canscora perfoliata Lam.

Rare in moist, cool and shady places. Flowers white. Fls. and Frts. December, 1970. 3901.

Enicostemma hyssopifolium (Willd.) Verd.

Occasional. Flowers white. Fls. December, 1970. 3831.

EHRETIACEAE

Carmona retusa (Vahl) Masamune

Common in scrub jungles. Flowers white. Fls. June, 1969. 3289, 3400.

Cordia obliqua Willd.

Occasional on tank bunds near villages. Flowers white. Fls. June, 1969. 3413.

BORAGINACEAE

Heliotropium indicum Linn.

Common. Flowers purplish. Fls. and Frts. November, 1969. 3603.

H. supinum Linn.

Abundant in dried tanks. Flowers white. Fls. and Frts. May, 1969. 3246.

CONVOLVULACEAE

Evolvulus alsinoides Linn.

Common in grasslands. Flowers blue. Fls. and Frts. November, 1969. 3485.

Ipomoea muricata (L.) Jacq.

An occasional climber with large purple flowers. Fls. December, 1970. 3793.

I. obscura (L.) Ker.-Gawl.

Occasional on hedges. Flowers white. Fls. December, 1970. 3985.

Merremia tridentata Hallier

Common. Flowers yellow. Fls. and Frts. June, 1969. 3281.

Rivea hypocrateriformis (Lam.) Choisy.

Common. Flowers white. Fls. and Frts. November-December, 1969, 1970. 3502, 3531, 3976.

SOLANACEAE

Datura fastuosa Linn.

Occasional. Flowers white. Fls. and Frts. November, 1969. 3821.

Solanum nigrum Linn.

Common in waste places. Flowers small and white. Fls. and Frts. December, 1969. 3556.

S. surattense Burm.f.

Occasional in dry places. Flowers violet. Fls. and Frts. June, 1969. 3403.

SCROPHULARIACEAE

Bacopa monnieri (L.) Wettstein

Abundant in pure stands in moist soil. Flowers bluish-purple or almost white. Fls. May, 1969. 3234.

Lindernia hyssopoides (L.) Haines

Common. Flowers purple. Fls. and Frts. December, 1970. 3829.

L. oppositifolia (Don) Mukerjee

Common. Flowers bright purple. Fls. December, 1970. 3827.

Limnophila indica (L.) Druce

Common. Flowers turbid white. Fls. December, 1970. 3857.

Striga angustifolia (Don) Saldanha

Common, but scattered in pasture lands. Flowers white. Fls. November-December, 1969, 1970. 3496, 3798, 3849.

S. lutea Lour. var. **lutea**

Rare, found among grasses on hill slopes. Flowers yellow. Fls. December, 1970. 4152.

MARTINIACEAE

Martynia annua Linn.

Occasional in the forests near Railway Station. Flowers purple. Fls. January, 1970. 3557.

PEDALIACEAE

Sesamum indicum Linn.

Solitary in waste places. Probably an escape from cultivation. Frts. December, 1970. 4134.

ACANTHACEAE

Adhatoda vasica Nees

Occasional in hedges near villages. Flowers

white. Fls. and Frts. February, 1971. 4002.

Andrographis echiioides (L.) Nees

Common. Flowers purple. Fls. and Frts. May, 1969. 3266.

A. paniculata (Burm.f.) Wall. ex Nees

Common. Flowers purple. Fls. and Frts. December, 1970. 3870.

Asystasia gangetica T. And.

Common. Flowers white. Fls. and Frts. February, 1971. 4106.

Barleria prionitis Linn.

Common among bushes. Flowers yellow. Fls. November-December, 1969, 1970. 3474, 3873, 3936.

Blepharis boerhaaviaefolia Pers.

Common in the undergrowth. Flowers turbid white. Fls. and Frts. December, 1970. 3962.

Elytraria acaulis (L. f.) Lindau

Common. Flowers white. Fls. May, 1969. 3293.

Justicia diffusa Willd.

Common. Flowers purple. Fls. and Frts. December, 1970. 4159.

J. prostrata (Roxb. ex C.B.Cl.) Gamble

Occasional. Flowers purple. Fls. and Frts. May, 1969. 3296.

J. glauca Rottl.

Common. Flowers purple. Fls. and Frts. December, 1970. 3964, 4105.

Lepidagathis mitis Dalz.

Common in hard soil. Flowers purple. Fls. and Frts. December, 1969. 3856, 3913.

VERBENACEAE

Gmelina asiatica Linn.

Common in scrub jungles. Flowers yellow. Pendulous. Fls. May-June, 1969, 1970. 3226, 4132.

Lantana camara Linn. var. **aculeata** (L.) Moldenke

Common and abundant. Flowers purple and white. Fls. and Frts. May and November, 1969. 3290, 3505.

Phyla nodiflora (L.) Greene

Common in large patches in moist soil. Flowers white with purple streak. Fls. and Frts. November, 1970. 3799.

Tectona grandis Linn. f.

A few trees at Malleswara Kona in lead. December, 1970. 3564.

Vitex altissima Linn.

Occasional in forests. Flowers white. Fls. November, 1970. 4144.

V. leucoxylon Linn. f.

Rare. In the absence of reproductive parts identification is provisional. December, 1970. 3927.

V. negundo Linn.

Common. Flowers bluish-mauve. Fls. May, 1969. 3235, 3273.

LAMIACEAE

Anisochilus carnosus Wall.

Occasional, Flowers light purple. Fls. and Frts. December, 1970. 3905.

Anisomelis indica (L.) O. Kuntze

Common in hedges. Fls. purple. Fls. and Frts. December, 1969, 1970. 3269, 3621, 3847.

A. malabaricus R. Br.

Common. Flowers rosy-purple. Fls. and Frts. December-February, 1969, 1970. 3269, 3852, 3926, 4167.

Geniosporum tenuiflorum (L.) Merr.

Occasional along earth bunds in cultivated fields. Flowers small, purple. Fls. and Frts. February, 1970. 4004.

Leonotis nepetaefolia R. Br.

Occasional. Flowers orange-red. Fls. and Frts. January-March, 1970. 4012, 4104.

Leucas aspera (Willd.) Spreng.

Common. Flowers white. Fls. and Frts. November, 1969. 3504.

L. biflora R. Br.

Occasional. Flowers white. Fls. and Frts. November-December, 1969, 1970. 3506, 3949.

L. javandulifolia Rees.

Common on hill slopes. Flowers white. Fls. June, 1969. 3342.

Ocimum americanum Linn.

Common. Flowers purplish-white. Fls. and Frts. February and June, 1969, 1970. 3408, 4009.

Orthosiphon pallidus Royle ex Bth.

Common. Flowers purplish white. Fls. and Frts. November, 1969. 3500.

NYCTAGINACEAE

Boerhaavia diffusa Linn.

Common. Flowers purple. Fls. and Frts. June, 1969. 3316.

AMARANTACEAE

Achyranthes aspera Linn.

Common. Flowers small, dry-white. Fls. and Frts. January, 1969. No number. D. V. Sub-baiah.

Aerva lanata (L.) Juss.

Common. Flowers white in wooly spikes. Fls. and Frts. December, 1970. 3866.

A. monsoniae Mart.

Common in dry sandy soil. Spikes pale pink. Fls. and Frts. December, 1970. 3910.

Alternanthera sessilis (L.) DC.

Common and abundant in moist margins of temporary ponds and puddles. Flowers white. Fls. and Frts. November, 1969. 3559.

Digera alternifolia (L.) Aschers

A common weed. Flowers purple. Fls. and Frts. February, 1970. 4008.

Pupalia lappacea (L.) Juss.

Occasional. Fruiting. Frts. December, 1970. 3969.

FLORA OF VENKATAGIRI HILLS

ARISTOLOCHIACEAE

Aristolochia bracteolata Lam.

Common in the dry soil. Flowers deep purple. Fls. February, 1970. Frts. May, 1969. 3224, 3259, 4014.

LAURACEAE

Cassytha filiformis Linn.

Common stem parasite in scrub jungles. Flowers white. January, 1971. 3224, 3259, 4014.

LORANTHACEAE

Dendrophthoe falcata (L. f.) Etting var. **coccinea** (Talb.) Sant.

Common. Flowers red. Fls. December, 1970. 3878, 3897.

Viscum articulatum Burm f.

Occasional. Flowers small, green. Fls. and Frts. December, 1970. 4118, 4155.

EUPHORBIACEAE

Acalypha indica Linn.

Common and abundant in waste places. Fls. small. Fls. and Frts. November-January, 1970. 3561.

Bridelia retusa (L.) Spreng.

Rare in forests. Frts. November, 1970. 4154.

Cleistanthus collinus (Roxb.) Bth. & Hook.

Occasional in forests. Frts. February, 1970. 3868, 4126.

Croton bonplandianum Baill.

Common and abundant in waste places. Male flowers white, females green. Fls. and Frts. November-January, 1969, 1970. 3659.

Euphorbia hirta Linn.

Common. Flowers minute, greenish. Fls. and Frts. May, 1969. 3256.

E. serpens H.B.K.

Common. Flowers minute, green. Fls. and

Frts. May, 1969. 3245.

E. tirucalli Linn.

Occasional in hedges. Frts. (dried) June, 1969. 3327.

E. trigona Haw.

Common and abundant in scrub jungles. Flowers red. Fls. January, 1970. 3414, 4114.

Hemicyclia sepiaria Wt. & Arn.

Occasional in scrub jungles. Flowers small white. Fls. and Frts. December, 1970. 3562.

Homonoia riparia Lour.

Common at Malleswara Kona. Flowers red. Fls. and Frts. December, 1969. 3946, 4156.

Jatropha gossypifolia Linn.

Common in scrub jungles. Flowers red. Fls. and Frts. May, 1969. 3216, 4136.

Mallotus philippinensis (Lam.) Muell.-Arg.

Common at Malleswara Kona. Fruits with red tomentum. Frts. December, 1969. 3616.

Micrococca mercurialis Bth.

Common in fields. Flowers minute. Fls. February, 1970. 4113.

Phyllanthus asperulatus Hutch.

Common. Flowers small, greenish. Fls. and Frts. November-February, 1969, 1970. 3568.

P. debelis Ham.

Common. Flowers small, pale green. Fls. and Frts. December-February, 1970, 1971. 3997, 4116.

P. maderaspatensis Linn.

Common. Flowers purplish-white. Fls. and Frts. January, 1971. 4117, 4144.

P. simplex Retz.

Common. Flowers small, greenish-white. Fls. and Frts. November, 1969. 3466.

Ricinus communis Linn.

Occasional in waste land. Flowers, yellowish-white. Fls. February, 1971. 4018.

Sebastiania chamaelea Muell.-Arg.

An occasional weed in cultivated fields. Flowers small, white. Fls. and Frts. January, 1970. 3810.

Securinega virosa (Roxb. ex Willd.) Pax. & Hoffm.

Common. Fruits fleshy and white. Frts. November, 1969. 3331, 3530.

Tragia involucrata Linn.

Occasional among bushes. Flowers minute, greenish. Fls. May, 1969. 3260.

Trewia nudiflora Linn.

Rare in hedges. Flowers small, greenish. Fls. December, 1970. 3834.

MORACEAE

Ficus gibbosa Bl. var. **parasitica** King.

Rare in forests. Fls. and Frts. December, 1969. 3978.

F. hispida Linn. f.

Occasional near villages. Frts. May, 1969. 3208, 3271.

F. racemosa Linn.

Occasional in villages. Vegetative, May, 1969. 3292.

F. religiosa Linn.

Common. Fruits red. March-April, 1969. 3564.

MONOCOTYLEDONS

HYDROCHARITACEAE

Hydrilla verticillata Royle

Abundant in ponds. May, 1969. 3285.

Ottelia alismoides (L.) Pers.

Occasional but gregarious in roadside ponds. Flowers white. Fls. October, 1969. 3447.

Vallisneria spiralis Linn.

Abundant in ponds. Fls. May, 1969. 3276.

ORCHIDACEAE

Eulophia epidendracea (Retz.) Fischer

Rare. Flowers greenish-white with purplish streak. Fls. December, 1970. 3887.

Habenaria hollandiana Sant.

Rare in cool, shady and moist places. Flowers dull white, with greenish tinge. Fls. December, 1969. 3606A.

H. digitata Lindl.

Occasional. Flowers dull white. Fls. December, 1969, 1970. 3606D, 3966.

H. plantaginea Lindl.

Occasional. Flowers pure white. Fls. December, 1969. 3606.

H. platyphylla Spr.

Occasional. Flowers white. Fls. January, 1970. 3806.

Vanda roxburghii R. Br.

Rare. Frts. December, 1970. 4153.

HYPOXIDACEAE

Curculigo orchioides Gaertn.

Common in the undergrowth in forests. Flowers yellow. Fls. November-December, 1969, 1970. 3482, 3577, 3797.

DIOSCOREACEAE

Dioscorea oppositifolia Linn.

Common. Flowers greenish. Fls. December, 1970. 3891, 4173.

D. pentaphylla L. var. **linnaei** Pr. & Burk.

Common. Flowers small green. Fls. November-December, 1969, 1970. 3460, 3609, 3957.

LILIACEAE

Aloe barbadens Mill.

Occasional in scrub jungles. Flowers saffron red. Fls. November, 1970. 3801.

Asparagus racemosus Willd.

Common in forests. Frts. December, 1969, 1970. 3639, 3958.

Gloriosa superba Linn.

Common. Flowers red with yellow streaks. Fls. November-December, 1969, 1970. 3524, 3626, 3937.

Iphiginea indica (L.) A. Gray

Rare among grasses. Flowers deep purple. Fls. and Frts. November, 1969. 3512.

Scilla hyacinthiana (Roth.) Macbr.

Common during monsoon in grass lands. Flowers mauve. Fls. and Frts. October, 1971. 4101, 4125.

HAEMODORACEAE

Sansevieria roxburghiana Schult.

Common in dry places in scrub jungles. Flowers white. Fls. January, 1971. 3954, 4150.

COMMELINACEAE

Amischocephalus axillaris (L.) Rao & Kama-
thy

Common among grasses. Flowers purple. Fls. and Frts. December, 1970. 3826.

Commelina benghalensis Linn.

Common in moist places. Flowers blue. Fls. and Frts. October-November, 1969. 3565.

C. diffusa Burm. f.

Common trailing on the ground. Flowers purple. Fls. and Frts. October, 1971. 4103.

C. fasciculata (Heyne ex Roth) Schult.

Common among grasses. Flowers blue. Fls. October, 1970. 4102.

C. tuberosa (Roxb.) Schult.

Common in the undergrowth. Flowers blue. Fls. November, 1969. 3501.

Murdania spirata (L.) Bruckn.

Common. Flowers purple. Fls. and Frts. December, 1970. 3861.

PALMACEAE

Borassus flabelliformis Linn.

Common all over the district in the plains. Frts. May-June, 1969. 3565.

Phoenix humilis Royle var. **pedunculata** Becc.

Rare in the forests. In the absence of reproductive organs identification is provisional. December, 1970. 3939.

P. sylvestris (L.) Roxb.

Common in the plains. Frts. May, 1969. 3247, 3800.

ARACEAE

Arisaema leschenaultii Bl.

Rare in the Visvodaya College building construction site. The specimens match with the herbarium sheets at Madras Herbarium. In the absence of flowers and fruits identification is provisional. November, 1970. 3854.

APONOGETONACEAE

Aponogeton natans (L.) Engl. & Krause

Common in temporary ponds. Flowers mauve. Fls. November, 1969. 3509.

NAJADACEAE

Najas minor All. var. **spinosa** Rendle

Abundant in a pond at Kasigardens. Frts. May, 1969. 3286.

ERIOCAULACEAE

Eriocaulon quinquangulare Linn.

Common and abundant on moist margins of roadside puddles. Heads grey-white. Heads. December, 1970. 3844.

CYPERACEAE

Bulbostylis barbata (Rottb.) Cl.

Common. Spikelets November, 1969. 3475.

Cyperus aristatus Rottb.

Common along roadside temporary ponds. Spikelets December, 1970. 3840.

C. clarkei T. Cooke.

Occasional. Spikelets November, 1969. 3494.

C. compressus Linn.

Common. Spikelets February, 1971. 4100.

C. iria Linn.

Common in rice fields. Spikelets November, 1969, 1970. 3533, 4137.

- C. polystachyos** var. **laxiflorus** Bth.
Common. Spikelets December, 1970. 3990.
- C. tenuispica** Steud.
Common. Spikelets December, 1970. 3989.
- C. triceps** (Rottb.) Endl.
Common among grasses. Spikelets in white heads. December, 1970. 3836, 3838.
- Eleocharis capitata** R. Br.
Common in the crevices of rocks in the river bed. Spikelets, May, 1969. 3253.
- Fimbristylis argentea** Vahl
Common. Spikelets June, 1969. 3307.
- F. falcata** (Vahl) Kunth.
Common in moist places in river bed. Spikelets, November, 1970. 3803.
- F. littoralis** Gaud.
Common. Spikelets December, 1970. 3835.
- F. ovata** (Burm. f.) Kern
Occasional. Spikelets November, 1969. 3498.
- F. shoenoides** Vahl
Occasional. Spikelets December, 1970. 3837.
- F. tenera** R. & S.
Common. Spikelets November, 1969. 3494.

GRAMINEAE

- Apluda mutica** Linn.
Common. Spikelets December, 1970. 3975.
- Aristida adscencionis** Linn.
Common. Spikelets December, 1969. 3288, 3338.
- A. depressa** Retz.
Common. Spikelets June, 1969, December, 1970. 3337, 3843, 3874.
- Centotheca lappacea** Desv.
Common. Spikelets December, 1970. 3900.
- Chloris barbata** Sw.
Common. Spikelets June, 1969. 3358.
- Cymbopogon martinni** (Roxb.) Wats.
Common on hill slopes. Spikelets December, 1970. 3893.
- Eleusine coracana** Gaertn.
Cultivated. Spikelets February, 1971. 4021.

- Eragrostis aspera** Nees
Common. Spikelets December, 1970. 3859.
- E. gangetica** (Roxb.) Steud.
Occasional. Spikelets December, 1970. 3842.
- E. tenella** R. & S.
Common. Spikelets May, 1969. 3303.
- Heteropogon contortus** (L.) P. Beauv. ex R. & S.
Common. Spikelets December, 1970. 3841, 3925, 3987.
- Melanocenchris jacquemontii** Jaub. & Spach.
Occasional. Spikelets November, 1969. 3491.
- Oplismenus compositus** Beauv.
Common. Spikelets December, 1970. 3611.
- Panicum psilopodium** Trin.
Common. Spikelets December, 1970. 3994.
- Pennisetum hohenackeri** Hochst.
Cultivated as a fodder plant. Spikelets February, 1971. 4003.
- Perotis indica** (L.) O. Kuntze
Common. Spikelets May, 1969. 3262.
- Saccharum spontaneum** Linn.
Common and gregarious along water courses. Spikelets February, 1971. 4020.
- Sporobolus piliferus** Kunth.
Rare. Spikelets November, 1969. 3491.

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